We CLAIM:

1. Integrated GPS radio receiver apparatus comprising the combination of:

a wide band electronic warfare radio receiver having a plurality of channelized output signal paths each limited to a selected band of radio frequency signals;

said wide band electronic warfare radio receiver also including an electronic analog to digital converter circuit and an embodied Fourier transformation algorithm;

a global position system radio receiver circuit having a radio frequency signal input port; and

electrically connected with a selected one of said wide band electronic warfare radio receiver plurality of channelized output signal paths in receipt of input radio frequency signals there from;

said global position system radio receiver circuit generating a sequence of geographic location identification output signals in response to a sequence of global position system input signals received from said selected electronic warfare radio receiver channelized output signal.

2. The integrated GPS radio receiver apparatus of claim 1 wherein said embodied Fourier transformation algorithm generates a total of 2N output frequency channel signals of N channel and N channel symmetric distribution along a frequency axis and wherein said global position system radio receiver circuit is connected with a single one of said frequency channel signals.

3. The integrated GPS radio receiver apparatus of claim 2 wherein said embodied Fourier transformation algorithm generates a total of two hundred fifty six output signal frequency channels and wherein one hundred twenty eight of said output signal frequency channels are used in said electronic warfare radio receiver.

4. The integrated GPS radio receiver apparatus of claim 1 wherein said wide band electronic warfare radio receiver includes an approximated Kernel function Fourier transformation realization.

5. The integrated GPS radio receiver apparatus of claim 4 wherein said approximated Kernel function Fourier transformation includes four Kernel function approximation points.

6. The integrated GPS radio receiver apparatus of claim 1 wherein said approximated Kernel function Fourier transformation includes a combination of unit circle and unit circle-adjacent Kernel function approximation points.

7. The integrated GPS radio receiver apparatus of claim 1 wherein said electronic warfare radio receiver plurality of channelized output signal paths each include both real and imaginary component parts and wherein one of said component parts is used in said global position system radio receiver circuit.

8. The integrated GPS radio receiver apparatus of claim 1 wherein said electronic warfare radio receiver includes an output signal channel of center frequency located within four megahertz of a 1.57542 Gigahertz global position system signal.

9. The integrated GPS radio receiver apparatus of claim 1 wherein said wide band electronic warfare radio receiver analog to digital converter circuit operates at a sampling rate above two gigahertz and generates a two hundred fifty six point Fourier transformation.

10. The integrated GPS radio receiver apparatus of claim 1 wherein said electronic warfare radio receiver includes an output signal channel of center frequency less than four megahertz difference frequency from a 1.57542 Gigahertz global position system signal and said less than four megahertz difference frequency is achieved in response to selection of an appropriate electronic warfare radio receiver analog to digital converter circuit sampling rate.

11. The integrated GPS radio receiver apparatus of claim 1 wherein said wide band electronic warfare radio receiver embodied Fourier transformation algorithm is a fast Fourier transformation algorithm.

12. The method of generating geographic position indicating data from electromagnetic wave communicated global position system radio frequency signals, said method comprising the steps of:

communicating electrical signals representing said electromagnetic wave-communicated global position system radio frequency signals to an input signal port of a wide band electronic warfare radio receiver;

forming from said global position system signals in said wide band electronic warfare radio receiver a plurality of frequency-channelized electronic warfare receiver output radio frequency signals using an embodied Fourier transformation algorithm processing;

coupling an input signal port of a global position system radio receiver to a selected one of said frequency-channelized electronic warfare receiver output radio frequency signals; and

generating, in said global position system radio receiver, geographic position indicating data determined by said selected electronic warfare receiver output radio frequency signals.

13. The method of generating geographic position indicating data from electromagnetic wave communicated global position system radio frequency signals of claim 12 wherein said selected one of said frequency-channelized electronic warfare receiver output radio frequency signals is chosen to have a frequency adjacent a characteristic center frequency of a global position system signal.

14. The method of generating geographic position indicating data from electromagnetic wave communicated global position system radio frequency signals of claim 13 wherein said selected one of said frequency-channelized electronic warfare receiver output radio frequency signals and said characteristic center

frequency of a global position system signal are segregated by a frequency difference generating less than two decibels of signal to noise attenuation in said global position system signal.

15. The method of generating geographic position indicating data from electromagnetic wave communicated global position system radio frequency signals of claim 13 further including the step of determining an analog to digital converter circuit sampling rate in said wide band electronic warfare radio receiver in response to disposing said selected one of said frequency-channelized electronic warfare receiver output radio frequency signals within a selected difference frequency of said characteristic center frequency of said global position system signal.

16. The method of generating geographic position indicating data from electromagnetic wave communicated global position system radio frequency signals of claim 15 wherein said step of determining an analog to digital converter circuit sampling rate in said wide band electronic warfare radio receiver determines a frequency of $2.505015652173913 \times 10^9$ Hertz and wherein said determined sampling rate disposes said selected one of said frequency-channelized electronic warfare receiver output radio frequency signals at a frequency bin 96 location.

17. The method of generating geographic position indicating data from electromagnetic wave communicated global position system radio frequency signals of claim 12 wherein said plurality of frequency-channelized electronic warfare receiver output radio frequency signals are one hundred twenty eight in number and wherein said selected one of said radio frequency signals is a ninety sixth of said radio frequency signals away from a zero frequency signal.

18. The method of generating geographic position indicating data from electromagnetic wave communicated global position system radio frequency signals of claim 12 wherein said electronic warfare radio receiver includes an operating step of approximating a Fourier transformation Kernel function with a plurality of unit magnitude values.

19. The method of generating geographic position indicating data from electromagnetic wave communicated global position system radio frequency signals of claim 12 wherein said global position system signal includes a C/A code signal component.